REMARKS

The Office Action of March 7, 2007 was received and carefully reviewed. The Applicants acknowledge with appreciation, the Examiner's indication of allowable subject matter in claims 6 and 17 if rewritten in independent form to include the limitations of the base claim, and any intervening claims. The remaining claims 1-5, 7-16, and 18-29 stand rejected. In response thereto, the present Request for Reconsideration is submitted. Correspondingly, claims 1-29 are still pending in the present application. Reconsideration and withdrawal of the currently pending rejections are requested for the reasons advanced in detail below.

Referring to the Office Action, claims 1-5, 7-16, 18, 22, 23-25 and 27-29 were rejected under 35 U.S.C. 102(b) as anticipated by, or in the alternative, under 35 U.S.C. 103(a) as obvious over, U.S. Patent No. 4, 919,754 to Mollett or U.S. Patent No. 5,248,388 to Richmann. The Applicants respectfully disagree.

Regarding the anticipation rejection, the invention disclosed in Mollett requires a resin precursor, a cross linker, and a catalyst, which are not required in the present invention. The Examiner notes that the present claims do not exclude the presence of these components, and while it is correct that the present claims use the non-limiting word "comprises", the question with respect to an anticipation rejection is not whether other materials can be present, but whether the disclosure of the prior art document anticipates the scope of the claims of the present application.

In the above regard, it is specifically noted that the resin precursor in Mollett "typically comprises a mixture of a fluid prepolymer having at least two reactive functional groups per molecule and a cross linking agent able to react with the functional groups, at least in the presence of a suitable catalyst." (See Mollett, Col. 2, lines 61-66). The additive in the present invention is an organomodified siloxane as specifically recited in independent claim 1. Neither the fluid prepolymer nor the crosslinker disclosed in Mollett is disclosed or taught as having a group Z as defined in claim 1. The resin precursor described in the Examples of Mollett consists of 50% of a hydeoxyl-functional polydimethysiloxane, 45% of an SiH functional polydimethylsiloxane, in addition to 5% of a polyethyleneoxy-/polpropyleneoxy-functional polydimethysiloxane which is present as a dispersant (see Mollett, Col. 3, lines 32-36 and Col. 7, lines 42-45). The dispersant is not present as a deinking additive, and

insufficient details are given about its structure to be able to determine whether or not it falls within the definition of the additive in present independent claim 1, in particular, regarding values of q, s, R^2 and R^3.

Regarding the Richmann reference, the Examiner argues that while the preferred deinking method disclosed is not floatation, it would have been generally known to a person of ordinary skill to use floatation as a functionally equivalent option, thereby asserting anticipation. The Applicants respectfully disagree. While Richmann notes that the use of floatation is known (see Richmann, Col. 1, line 66), it is clear that floatation is only referred to in relation to a traditional process, i.e. is not relevant to the invention disclosed in Richmann, and further, is referred to only in relation to materials with an HLB above 10. Correspondingly, Richmann's invention only relates to materials with an HLB between 0.5 and 10 and to separation through centrifugal cleaning and/or screening (see Richmann, Col. 2, lines 21-24). In other words, flotation is not disclosed as an option with respect to the invention as claimed by Richmann, and in fact, Richmann teaches an alternative to the traditional process of flotation in view of its inadequacies, thereby teaching away from floatation altogether. Furthermore, Richmann describes the siloxane materials which may be used as being "dimethyllpolysiloxane alkoxylates" (see Richmann, Col. 2, line 54), "dimethysiloxane ethoxylates and propoxylates" (see Richmann, Col. 4, line 42), and "polyethoxylated and polypropoxylated polydimethylsiloxanes" (see Richmann, Col. 5 lines 45-48). No further details are provided, in particular, to the values of a, b, R^2, R^3, q and s as defined in the present claims.

Therefore, it is respectfully submitted that the Mollett reference and/or Richmann reference fail to disclose each and every limitation of the rejected claims. Correspondingly, the withdrawal of this rejection is respectfully requested.

Referring to the obviousness rejection and comments related thereto in the Office Action, the Examiner first appears to be alleging obviousness to one of ordinary skill in the art in view of Mollett alone. The Applicants note that with regard to claims 1-5, 7-13, 15-16, 23, 24-25 and 27-29 of the present application, the presence of the dispersant is clearly taught to be for the dispersion of the "relatively hydrophobic" resin precursor. Mollett describes a system based on a resin precursor, curable in the alkaline aqueous phase, preferably during pulping, the resin most preferably being a room temperature vulcanisable (see Mollett, Col. 2, lines 15-16) organopolysiloxane, which cured particles agglomerate (see Mollett, Col. 2, lines

21-22) to form a water-insoluble, non-finely-dispersible resin. This curing/cured resin is the active principle for deinking in Mollett. (See Mollett, Col. 2, lines 17-20).

Mollett discloses that any surfactant (anionic surfaces being less preferred) can be used as a dispersant (see Mollett, Col. 3, line 29), with film forming dispersants being preferred (see Mollett, Col. 3, lines 39-42). The use of surfactants as wetting agents and to aid liberation of the printing ink is common in floating deinking, but a person of ordinary skill in the art would not consider them for use as collectors in floating deinking.

The purpose of these materials in Mollett is clearly for dispersion of the resin precursor, and not for emulsion as suggested by the Examiner. Since the polydimethysiloxane polythyleneglycol ethers are not sufficiently defined (see arguments submitted in response to 35 U.S.C. 102 rejection above) to be reasonably equated with the organomodified siloxanes used in the present invention, and are additionally clearly taught to be dispersants, it is respectfully submitted that the Examiner's ex-post facto, hind-sight analysis (that in addition to it acting as a dispersant, it will act as a deinking agent) is not only unfounded, but goes against the teaching of Mollett, which indicates the dispersant is optional (see Mollett, Col. 3, lines 49-52 and claim 1). Clearly, such reasoning utilized by the Examiner is improper and this rejection should be withdrawn.

As discussed in the Amendment submitted response to the previous Office Action, a person skilled in the art would not have started from Mollett to look for a solution to the problem being addressed by the present invention (see Specification). In the unlikely event that one of ordinary skill in the art started from this reference, they would not have chosen a dispersant, but instead, a resin precursor which is undesirable. Furthermore, even if a dispersant were selected, a preferred dispersant would be chosen, not one selected from silicone polyethers which are insufficiently described in Mollett.

Regarding claim 14, it is respectfully submitted that the Examiner's arguments do not provide any reasons why this claim would be obvious. HLB is not a single criterion, as not all materials with relevant HLB would be useful. Again, the Applicants submit that the Examiner is using ex-post facto analysis and engaging in improper hind-sight reconstruction. The Examiner's argument that the molecular weight would be selected by the person of ordinary skill in the art because it would make the dispersant more miscible with the resin precursor is not relevant, since the present invention is not concerned with the presence of the resin precursor. The use of "comprises" in the present claims does not preclude such

presence. However, this not a reason to select specific materials to include such "potentially present" but nevertheless undesirable materials. The Examiner does not support his assertion that the use of a gum-based self-emulsifying polysiloxane would be obvious. It is noted that nothing in Mollett even suggest that self-emulsification is even desirable.

It is further submitted that the Examiner's argument regarding claims 1-5, 7-16, 18-19, 23-25 and 27-29 as being obvious over a combination of Mollett and Richmann is improper. In order to combine Mollett and Richmann, a person of ordinary skill in the art must have sufficient motivation to do so, and the mere fact that both documents relate to deinking is not sufficient. In particular, as noted above, Richmann does not teach deinking by the floatation process with materials having an HLB below 10, and neither Mollett nor Richmann provide details of the ethoxylated siloxanes (Mollett) or dimethysiloxane ethoxylates and propoxylates (Richmann) which would enable a person or ordinary skill in the art to determine which materials to use, even if these two documents were to be combined. It is further noted that if one were to start from Mollett and look for improvements in deinking by flotation, Richmann does not provide any useful teaching or guidance since it does not suggest floatation as an option at all. Indeed, as discussed above, the only suggestion for floatation is with regard to the use of nonionic/anionic surfactants with a HLB of greater than 10. (See Richman Col. 1, lines 61-66).

Alternatively, if one of ordinary skill in the art were to start from Richmann and look for improvements to make flotation possible (which Applicants submit a person of ordinary skilled in the art would not do since Richmann teaches away from such an approach), Mollett provides no assistance as the only suggestion would be to use a resin precursor. There would be no reason to seek an alternative or additional dimethysiloxane, ethoxylated or propoxylated, especially since Mollett only discloses their use as dispersants, and also because Mollett does not provide sufficient information about these materials to be able to make an appropriate selection. Nothing in either reference makes any suggestion of the potential or required values for R2, R3, q or s (and hence q+s) as defined in present independent claim 1.

The Examiner's comments and rejection of claims 15-16, 19 and 23 do not provide an appropriate basis for obviousness either, and thus, are believed to be improper. In addition, these claims are further believed to be patentable, at least for the reason of their ultimate dependency on an allowable independent claim.

Therefore, in view of the above, the Applicants submit that Examiner's rejection of claims 1-5, 7-16, 18, 22, 23-25 and 27-29 as being anticipated by, or obvious over, Mollett and/or Richmann is improper, and should be withdrawn. As discussed, these references fail to disclose each and every limitation of the claimed invention, and further fail to render these claims obvious since there is no teaching, suggestion or motivation to modify the disclosed methods of these references to result in the method of the present invention as claimed.

The Examiner also rejected claims 20 and 21 in light of Mollett and Richmann discussed above, in further view of U.S. Patent No. 5,228,369 to Ishibashi. However, the relevance of Ishibashi is not clear in that it does not cure the defects of the primary references Mollett and Richmann as discussed above. The Applicants acknowledge that fatty acids were known for use in deinking processes. It is noted that claims 20 and 21 do not rely on the use of fatty acids as a novel feature, but rather on the use of the specific siloxane polymers claimed. Correspondingly, the withdrawal of this rejection and the allowance of claims 20 and 21 are also respectfully requested.

Finally, it is noted that the dependent claim 26 was not specifically addressed in the Office Action but was identified as being rejected in the Office Action Summary. Regardless of the basis of the rejection, it is respectfully submitted that this claim is patentable, at least for the reason of its dependency on an allowable independent claim.

In view of the foregoing, it is submitted that the present application is in condition for allowance and a notice to that effect is respectfully requested. However, if any issue remains after considering this response, the Examiner is invited to call the undersigned to expedite the prosecution and work out any such issue by telephone.

Respectfully submitted,

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